

This listing of claims will replace all prior versions, and listings, of claims in the application:

Listing of Claims:

1.-6. (Canceled).

7. (Currently Amended) A method for executing a query that evaluates one or more records of a table according to predetermined selection criteria, comprising the steps of:

initializing a bitmap having a plurality of elements, each element of the bitmap corresponding to a record of the table, and each element is initialized to an active value;

running a first [[,]] primary task that individually retrieves each of the one or more records from storage according to whether the corresponding element of the bitmap has an active value;

running, concurrently with the first task, a second [[,]] background task that executes is associated with the same query as the first task and that updates the bitmap by setting to an inactive value the respective element of the bitmap corresponding to any record that does not satisfy at least a portion of the selection criteria, wherein running the second task includes including:

scanning a column of the table using an index built over the column, the portion of the selection criteria relating to record values within the column;

determining a set of records whose record values within the column do not satisfy the portion of the selection criteria; and

concurrently with the first task individually retrieving records from storage having corresponding active-value bitmap elements, changing the respective corresponding bitmap element to an inactive value for each record within the set of records; and

continuing to run the first task until all records from the table, having a corresponding active-value bitmap element, have been retrieved from storage,

including accessing the bitmap in the first task before at least one element is set to an inactive value by the second task to determine whether to retrieve a record from storage;

optimizing a query plan for the query by labeling the query as a candidate for dynamic bitmap updating; and

before initializing the bitmap and starting the first task and second task, determining if the query is labeled as a candidate for dynamic bitmap updating.

8. (Original) The method according to claim 7, wherein the step of running the first task includes the steps of:

determining if a retrieved record satisfies the selection criteria; and
returning, as part of a query result set, the retrieved record if the selection criteria is satisfied.

9. (Canceled).

10. (Original) The method according to claim 7, wherein the step of running a first task includes the step of:

discarding any record having a corresponding bitmap element which has an inactive value, by not retrieving that record from storage.

11.-12. (Canceled).

13. (Original) The method according to claim 9, wherein a first order in which the one or more records is retrieved differs from a second order in which the column of the table is scanned.

14. (Original) The method according to claim 7, further comprising the steps of:
collecting statistics related to performance of executing the query; and
generating a recommendation presented to a user for creating a permanent index based on the statistics.

15.-23. (Canceled).